



Complete Summary

TITLE

Appropriate environmental conditions in medication preparation and dispensing areas: does the hospital have clean, well-organized, quiet and well-lit medication preparation and dispensing areas?

SOURCE(S)

Ministry of Health. Safe practices indicators project: background, summary of methods and measurement strategies. Madrid: Ministry of Health; 2009 Feb 20. 97 p.

Measure Domain

PRIMARY MEASURE DOMAIN

Structure

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the [Measure Validity](#) page.

SECONDARY MEASURE DOMAIN

Does not apply to this measure

Brief Abstract

DESCRIPTION

This measure is used to determine whether or not the environmental conditions of the medication preparation and dispensing areas are adequate. These areas should be:

- Clean
- Well organized (uncluttered)
- Quiet
- Clear of any type of broken or used items
- Well-lit
- With nothing on floors

RATIONALE

A number of environmental factors in the medication preparation and dispensing area itself are known to increase the occurrence of errors, including heavy workload and cluttered workspace, whereas a well-lit, well-organized and distraction-free workspace has been shown to both decrease error and increase efficiency.

Clean and well-organized medication dispensing areas reflect endeavors on the part of the pharmacy service to prevent errors.

PRIMARY CLINICAL COMPONENT

Environmental conditions; medication preparation and dispensing areas

DENOMINATOR DESCRIPTION

This measure applies to hospitals (one hospital at a time).

NUMERATOR DESCRIPTION

The hospital's environmental conditions of the medication preparation and dispensing are adequate (see the related "Numerator Inclusions/Exclusions" field in the Complete Summary).

Evidence Supporting the Measure

EVIDENCE SUPPORTING THE CRITERION OF QUALITY

- A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence
- A formal consensus procedure involving experts in relevant clinical, methodological, and organizational sciences
- One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

Evidence Supporting Need for the Measure

NEED FOR THE MEASURE

Use of this measure to increase capacity

EVIDENCE SUPPORTING NEED FOR THE MEASURE

Ministerio de Sanidad y Consumo. Indicadores de buenas practicas sobre seguridad del paciente. Resultados de su medicion en una muestra de hospitales del sistema nacional de salud Español. Madrid: Ministerio de Sanidad y Consumo; 2008. 95 p.

State of Use of the Measure

STATE OF USE

Current routine use

CURRENT USE

Internal quality improvement

Application of Measure in its Current Use

CARE SETTING

Hospitals

PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Measure is not provider specific

LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Single Health Care Delivery Organizations

TARGET POPULATION AGE

Does not apply to this measure

TARGET POPULATION GENDER

Does not apply to this measure

STRATIFICATION BY VULNERABLE POPULATIONS

Does not apply to this measure

Characteristics of the Primary Clinical Component

INCIDENCE/PREVALENCE

Environmental conditions in medication preparation and dispensing areas have some room for improvement in 55% of hospitals.

EVIDENCE FOR INCIDENCE/PREVALENCE

Ministerio de Sanidad y Consumo. Indicadores de buenas practicas sobre seguridad del paciente. Resultados de su medicion en una muestra de hospitales

del sistema nacional de salud Español. Madrid: Ministerio de Sanidad y Consumo; 2008. 95 p.

ASSOCIATION WITH VULNERABLE POPULATIONS

Unspecified

BURDEN OF ILLNESS

Unspecified

UTILIZATION

Unspecified

COSTS

Unspecified

Institute of Medicine National Healthcare Quality Report Categories

IOM CARE NEED

Not within an IOM Care Need

IOM DOMAIN

Not within an IOM Domain

Data Collection for the Measure

CASE FINDING

Does not apply to this measure

DENOMINATOR SAMPLING FRAME

Does not apply to this measure

DENOMINATOR INCLUSIONS/EXCLUSIONS

Inclusions

This measure applies to hospitals (one hospital at a time).

Exclusions

None

RELATIONSHIP OF DENOMINATOR TO NUMERATOR

Does not apply to this measure

DENOMINATOR (INDEX) EVENT

Does not apply to this measure

DENOMINATOR TIME WINDOW

Does not apply to this measure

NUMERATOR INCLUSIONS/EXCLUSIONS

Inclusions

The hospital's environmental conditions of the medication preparation and dispensing* are adequate**.

*Medication preparation and dispensing areas in the hospital pharmacy service are considered to be areas in which:

- Medications are repackaged
- Sterile preparations are prepared (parenteral nutrition, intravenous mixtures, cytostatic drug doses and magistral and sterile standardized formulas)
- Magistral and standardized formulas are prepared

**These areas should be:

- Clean
- Well organized (uncluttered)
- Quiet
- Clear of any type of broken or used items
- Well-lit
- With nothing on floors

Exclusions

None

MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

NUMERATOR TIME WINDOW

Encounter or point in time

DATA SOURCE

Special or unique data

LEVEL OF DETERMINATION OF QUALITY

Does not apply to this measure

PRE-EXISTING INSTRUMENT USED

None

Computation of the Measure

SCORING

Categorical Variable

INTERPRETATION OF SCORE

Passing score defines better quality

ALLOWANCE FOR PATIENT FACTORS

Does not apply to this measure

STANDARD OF COMPARISON

Internal time comparison

Evaluation of Measure Properties

EXTENT OF MEASURE TESTING

After pilot testing, the set of indicators has been measured in a random sample of 25 Spanish hospitals, stratified by hospital size. The main objective has been to field test the feasibility of measurement in the various settings representing real life situations in the context of the Spanish Health Care System.

Both the whole indicators validation report and the results of the baseline measurement in a sample of the Spanish National Health Service (NHS) hospitals may be accessed and downloaded from the Spanish Ministry of Health web page (in Spanish):

- [Validation report](#)
- [Results of baseline measurement in Spanish NHS hospitals](#)

EVIDENCE FOR RELIABILITY/VALIDITY TESTING

Ministerio de Sanidad y Consumo. Construcción y validación de indicadores de buenas prácticas sobre seguridad del paciente. Madrid: Ministerio de Sanidad y Consumo; 2008. 178 p.

Ministerio de Sanidad y Consumo. Indicadores de buenas practicas sobre seguridad del paciente. Resultados de su medicion en una muestra de hospitales del sistema nacional de salud Español. Madrid: Ministerio de Sanidad y Consumo; 2008. 95 p.

Ministry of Health. Safe practices indicators project: background, summary of methods and measurement strategies. Madrid: Ministry of Health; 2009 Feb 20. 97 p.

Identifying Information

ORIGINAL TITLE

Clean, well-organized, quiet and well-lit medication preparation and dispensing areas.

MEASURE COLLECTION

[Safe Practices Indicators Project](#)

MEASURE SET NAME

[Increase Safe Medication Use](#)

MEASURE SUBSET NAME

[Environmental Conditions in Medication Preparation and Dispensing Areas](#)

SUBMITTER

Spanish Agency for Healthcare Quality of the Spanish Ministry of Health

DEVELOPER

Grupo de Investigación sobre Gestión de la Calidad en Servicios de Salud, University of Murcia, under contract to the Spanish Ministry of Health

FUNDING SOURCE(S)

Agency for Quality, Spanish Ministry of Health

COMPOSITION OF THE GROUP THAT DEVELOPED THE MEASURE

Saturno, Pedro J., MD, DrPH; Group Director and Project PI

Castillo, Carmen; López, M. José; Ramón, Teresa; Nurses

Carrillo, Andrés, MD; Intensive Care Specialist

Iranzo, M. Dolores; Hospital pharmacist

Soria, Victor, MD; Surgeon

Parra, Pedro, MD; Gomis, Rafael, MD; Gascón, Juan J., MD; Quality Management Specialists

FINANCIAL DISCLOSURES/OTHER POTENTIAL CONFLICTS OF INTEREST

Project entirely financed by the Spanish Ministry of Health.

ADAPTATION

Measure was not adapted from another source.

RELEASE DATE

2009 Feb

MEASURE STATUS

This is the current release of the measure.

SOURCE(S)

Ministry of Health. Safe practices indicators project: background, summary of methods and measurement strategies. Madrid: Ministry of Health; 2009 Feb 20. 97 p.

MEASURE AVAILABILITY

The individual measure, "Clean, Well-organized, Quiet and Well-lit Medication Preparation and Dispensing Areas," is published in "Safe Practices Indicators Project: Background, Summary of Methods and Measurement Strategies."

For more information, contact:

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COMPANION DOCUMENTS

The following are available:

- Ministerio de Sanidad y Consumo. Construcción y validación de indicadores de buenas prácticas sobre seguridad del paciente. Madrid: Ministerio de Sanidad y Consumo; 2008. 178 p. This document is available in Portable Document Format (PDF) from the [Ministry of Health and Social Policy Web site](#) (in Spanish).
- Ministerio de Sanidad y Consumo. Indicadores de buenas prácticas sobre seguridad del paciente. Resultados de su medición en una muestra de hospitales del sistema nacional de salud Español. Madrid: Ministerio de Sanidad y Consumo; 2008. 95 p. This document is available in PDF from the [Ministry of Health and Social Policy Web site](#) (in Spanish).

NQMC STATUS

This NQMC summary was completed by ECRI Institute on September 11, 2009. The information was verified by the measure developer on December 23, 2009.

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